

APPARATUS AND METHOD FOR CALCULATING AND IMPLEMENTING A
FIBONACCI MASK FOR A CODE GENERATOR

ABSTRACT OF THE DISCLOSURE

- 5 An apparatus and method for calculating and implementing a Fibonacci mask for a code generator is disclosed herein. The first step receives a desired code offset from a reference code state in a Fibonacci field. Next, a field vector in a Galois field with the same code offset sought in the first field is calculated. In the next step, the first field vector is transformed into a second field vector, which is operable as a mask in the Galois LFSR.
- 10 The transform step is accomplished by multiplying the Galois field vector by a linear $N \times N$ transformation matrix to obtain the Fibonacci field vector. And the $N \times N$ transformation matrix is obtained from iterated states of the Fibonacci LFSR.

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